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SWINE ENTERPRISE STUDY

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INTRODUCTION

This report is a summary of the business performance of fourteen (14) finishing operations and sixteen (16) farrow to finish operation on Prince Edward Island for the calender year 1981.

The farms selected for this study were not chosen on a random basis, therefore, the results are not necessarily representative of all swine farms on PEI. For this reason, care should be exercised when interpreting these results.

The 1981 Prince Edward Island Swine Farm Business Summary is designed to provide benchmark information for use by farmers, agricultural representatives, farm management personnel and others. Comparing the average results of this study with their own farm records may assist swine producers in identifying problems and making amagement decisions.

The information used in this report includes only farms with 75 per cent or more of their income from the swine enterprise.

The thirty (30) farms sampled were grouped into two major categories - finishing and farrow to finish operations.

Detailed analysis was carried out for each group and also for subgroups classified by either number of hogs marketed (for finishing operations) or by number of sows (farrow to finish opertions).

Finishing Operations

1. Average of fourteen finishing operations.

2. Average of seven farms with less than 1100 hogs marketed per year and seven farms with 1100 or more hogs marketed per year.

Farrow to Finish Operations

1. Average of sixteen farrow to finish operations.

2. Average of eight farms with less than 70 sows and eight farms with more than 70 sows.

Results for each group are presented as:

1. Revenue
2. Expenses
3. Income Summary
4. Average Cost of Pork Production
5. Balance Sheet
6. Selected Information

Data

The majority of the data presented in the 1981 PEI Swine Farm Business Summary was obtained directly from a survey of farm records. For non-cash items the following criteria was used.

Depreciation for buildings and macinery was taken from the Capital Cost Allowance Schedule of the 1981 Income Tax Form. Buildings were considered to be any item in Class 6 or below. Machinery was an item above Class 6.

Building and Machinery Values were determined by taking their undeprciated portion as of December 31, 1981 from the 1981 Capital Cost Allowance Schedule.

Inventory Changes, where possible, for livestock, crops and supplies were calculated using figures for the beginning and end of 1981. If no inventory figures were available for the beginning or the end of the year the farmer was asked to estimate the investory change.

Land Values in determining land values a set rate of $500 per acre for cleared land (owned by the farmer) and $150 per acre for woodland (owned by the farmer) was used. This value was taken as of December 31, 1981.

Hog Inventory Values

Boars	- $250 per head
Swine and Gilts	- $225 per head
Weaners	- $36 per head
Market Hogs	- $98 per head

FINISHING OPERATIONS

AVERAGE OF FOURTEEN FINISHING OPERATIONS

Receipts from the sales of hogs for the finishing opertions average $155,498 per farm or $123.95 per market hog. Total hog sales accounted for 84 per cent of Total Current Income with stabilization accounting for roughly 7 per cent.

Total current income amounted to $184.550 per farm or $147.10 per market hog. (Table 1)

Table 1: Average Revenue for Fourteen (14) Finishing Operations - 1981

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)	PERCENT (%)
HOGS-MARKET	155497.86	123.95	73.65	84.26
-WEANLINGS	.00	.00	.00	.00
-GILTS	.00	.00	.00	.00
-BOARS	.00	.00	.00	.00
-CULL SOWS	.00	.00	.00	.00
-CULL BOARS	.00	.00	.00	.00
-OTHER	.00	.00	.00	.00
TOTAL HOG SALES	155497.86	123.95	73.65	84.26
STABILIZATION	12610.71	10.05	5.97	6.83
SUBSIDIES	208.93	.17	.10	.11
OTHER INCOME	16232.07	12.94	7.69	8.80
TOTAL CURRENT INCOME	184549.57	147.10	87.41	100.00

Purchased feed was the largest expense item totalling $83,613 per farm or $66.65 per market hog and represented 47 per cent of Total Current Expenses. Other major expense items included swine purchases (29 per cent) and other expenses (7.7 per cent).

Total Current Expenses amounted to $176,568 per farm or $140.74 per market hog. (Table 2)

Table 2: Average Expenses for Fourteen (14) Finishing Operations - 1981

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)	PERCENT (%)
FEED PURCHASES	83612.64	66.65	39.60	47.35
SWINE PURCHASES	50464.50	40.22	23.90	28.58
HIRED LABOUR	3730.93	2.97	1.77	2.11
BEDDING	18.14	.01	.01	.01
VETERINARY & DRUG	343.29	.27	.16	.19
HOG SUPPLIES	125.07	.10	.06	.07
MARKETING COSTS	515.14	.41	.24	.29
UTILITIES	2270.43	1.81	1.08	1.29
TAXES	481.43	.38	.23	.27
INSURANCE	951.64	.76	.45	.54
BUILDING REPAIRS	1623.07	1.29	.77	.92
MACH & EQUIP EXPENSES	5780.79	4.61	2.74	3.27
AUTO EXPENSES	963.43	.77	.46	.55
INTEREST(OPERATING)	8311.36	6.62	3.94	4.71
INTEREST(CAPITAL)	2394.86	1.91	1.13	1.36
MISCELLANEOUS	1353.36	1.08	.64	.77
OTHER EXPENSES	13628.00	10.86	6.45	7.72
TOTAL CURRENT EXPENSES	176568.07	140.74	83.63	100.00

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group, Net Cash Income amounted to $7,981.50 or $6.36 per market hog. (Table 3)

2. Net Farm Income is the difference between annual operating revenue and current expenses with adjustments made for inventory changes and depreciation. For this group, Net Farm Income averaged $3,632.64 or $2.90 per market hog. Net Farm Income in this instance represents the return to the factors used in the production of pork. These include operator and unpaid family labour (1.99 person years), management and a return to $140,699 of Owner's Equity. (Table 3)

Table 3: Income Summary for Fourteen (14) Finishing Opertions - 1981

	PER FARM ($)	PER MARKET HOG ($)	PER100 LBS MKTED ($)
TOTAL CURRENT INCOME	184549.57	147.10	87.41
TOTAL CURRENT EXPENSES	176568.07	140.74	83.63
NET CASH INCOME	7981.50	6.36	3.78
LESS:INVENTORY CHANGE	-3107.43	-2.48	-1.47
LESS:DEPRECIATION	7456.29	5.94	3.53
NET FARM INCOME	3632.64	2.90	1.72

The average cost of pork production for this group was $0.78 per pound marketed or $131.27 per market hog.

Note that costs used in this calculation did not include operator and family labour and interest on equity charges. For the purposes of this exercise, all non-hog enterprises were assumed to have made no profit or loss, non-hog sales (which equal non-hog expenses) were subtracted from total costs to reflect the costs associated with hog production only. (Table 4)

Table 4: Average Cost of Pork Production for Fourteen (14) Finishing Operations - 1981

	PER FARM ($)	PER MARKET HOG ($)	PER100 LBS MKTED ($)
TOTAL CURRENT EXPENSES	176568.07	140.74	83.63
PLUS:DEPRECIATION	7456.29	5.94	3.53
PLUS:INVENTORY CHANGE	-3107.43	-2.48	-1.47
TOTAL COST	180916.93	144.21	85.69
LESS:NON-HOG SALES	16232.07	12.94	7.69
NET HOG COST	164684.86	131.27	78.00

For this group the balance sheet indicated an average investment per farm of $210,394 and a debt load of $169,695. This showed an average equity position of 67 per cent.

Land represented the largest single investment (42 per cent) followed by hog inventory and buildings, 24 per cent and 17 per cent respectively. (Table 5)

Table 5: Balance Sheet for Fourteen (14) Finishing Operations - 1981

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)	PERCENT (%)
ASSETS				
HOGS-BOARS	.00	.00	.00	.00
-SOWS & GILTS	.00	.00	.00	.00
-NURSING PIGS	.00	.00	.00	.00
-FEEDERS	50412.32	40.18	23.88	23.96
-BREEDING STOCK	.00	.00	.00	.00
TOTAL HOG INVENTORY	50412.32	40.18	23.88	23.96
FEED	5778.96	4.61	2.74	2.75
LAND	89871.43	71.64	42.57	42.72
BUILDINGS	35133.32	28.00	16.64	16.70
MACHINERY & EQUIPMENT	28660.71	22.85	13.57	13.62
SUPPLIES	20.71	.02	.01	.01
ACCOUNTS RECEIVABLE	184.32	.15	.09	.09
OTHER	332.21	.26	.16	.16
TOTAL ASSETS	210394.00	167.70	99.65	100.00
LIABILITIES				
SHORT TERM	24310.43	19.38	11.51	34.88
INTERMEDIATE TERM	9215.61	7.35	4.36	13.22
LONG TERM	36168.86	28.83	17.13	51.90
TOTAL LIABILITIES	69694.89	55.55	33.01	100.00
OWNERS EQUITY	140699.11	112.15	66.64	66.87

Due to difficulties in obtaining some of the production information from a number of the farms surveyed, only limited production analysis is available. Management factors were also calculated to illustrate the financial and labour positions of this group.

FINANCIAL ANALYSIS

		PER FARM
EQUITY IN FARM	%	66.87
RETURN ON EQUITY	%	-9.89
RETURN ON INVESTMENT	%	-1.53
CAPITAL TURNOVER	YRS	1.14
CUR ASSETS/CUR LIAB.	$/$	2.32
ASSETS/LIABILITIES	$/$	3.02
DEBT/EQUITY RATIO	$/$	.50

PRODUCTION ANALYSIS

		PER FARM
AVERAGE MARKET HOGS SALES PER FARM	#	1,255.00
AVERAGE POUNDS OF PORK MARKETED	LBS	211,133.00
VALUE OF MARKET HOG SALES	$	155,498.00
TOTAL PERSON YEARS	#	1.99
FEEDERS SOLD/PERSON YR	#	630.66
TOTAL SALES/PERSON YR.	$	92,771.73
LBS SOLD/PERSON YR.	LBS	106,134.95

AVERAGE OF FARMS WITH LESS THAN
1100 HOGS MARKETED AND FARMS WITH
1100 OR MORE HOGS MARKETED

The fourteen (14) selected finishing operations were divided into two groups; those farms with less than 1100 hogs marketed per year (Table 6(a)) and those with 1100 or more hogs marketed per year (Table 6(b)).

For those farms with less than 1100 market hogs per year, receipts from the sale of hogs averaged $110,611.86 per farm or $117.91 per market hog. Total hog sales for this sub-group accounted for 77 per cent of Total Current Income and amounted to $143,821.57 per farm ($153.30 per market hog).

Total hog sales for the larger operations amounted to $200,383.86 per farm or $127.55 per market hog. Hog sales accounted for 89 per cent of Total Current Income which was $225,277.57 per farm or $143.40 per market hog.

Table 6 (a): Average Revenue - GROUP A

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)	PERCENT (%)
HOGS-MARKET	110611.86	117.91	70.18	76.91
-WEANLINGS	.00	.00	.00	.00
-GILTS	.00	.00	.00	.00
-BOARS	.00	.00	.00	.00
-CULL SOWS	.00	.00	.00	.00
-CULL BOARS	.00	.00	.00	.00
-OTHER	.00	.00	.00	.00
TOTAL HOG SALES	110611.86	117.91	70.18	76.91
STABILIZATION	12091.00	12.89	7.67	8.41
SUBSIDIES	71.43	.08	.05	.05
OTHER INCOME	21047.29	22.44	13.35	14.63
TOTAL CURRENT INCOME	143821.57	153.30	91.25	100.00

Table 6(b): Average Revenue - GROUP B

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)	PERCENT (%)
HOGS-MARKET	200383.86	127.55	75.72	88.95
-WEANLINGS	.00	.00	.00	.00
-GILTS	.00	.00	.00	.00
-BOARS	.00	.00	.00	.00
-CULL SOWS	.00	.00	.00	.00
-CULL BOARS	.00	.00	.00	.00
-OTHER	.00	.00	.00	.00
TOTAL HOG SALES	200383.86	127.55	75.72	88.95
STABILIZATION	13130.43	8.36	4.96	5.83
SUBSIDIES	346.43	.22	.13	.15
OTHER INCOME	11416.86	7.27	4.31	5.07
TOTAL CURRENT INCOME	225277.57	143.40	85.12	100.00

Total current expenses for Group A were on average 11.5 per cent more than Group B, $150.42 per market hog compared to $134.96 per market hog. Purchased feed was the largest expense for both groups followed by swine purchases. Other expenses were significantly more for Group A ($19.22 per market hog) (Table 7(a)) compared to Group B ($5.87 per market hog) (Table 7(b)).

Table 7(a): Average Expenses - GROUP A

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)	PERCENT (%)
FEED PURCHASES	60168.14	64.14	38.17	42.64
SWINE PURCHASES	36755.71	39.18	23.32	26.05
HIRED LABOUR	2175.71	2.32	1.38	1.54
BEDDING	.00	.00	.00	.00
VETERINARY & DRUG	434.00	.46	.28	.31
HOG SUPPLIES	85.29	.09	.05	.06
MARKETING COSTS	427.43	.46	.27	.30
UTILITIES	2058.14	2.19	1.31	1.46
TAXES	419.57	.45	.27	.30
INSURANCE	961.71	1.03	.61	.68
BUILDING REPAIRS	1793.14	1.91	1.14	1.27
MACH & EQUIP EXPENSES	4975.29	5.30	3.16	3.53
AUTO EXPENSES	492.00	.52	.31	.35
INTEREST(OPERATING)	8998.71	9.59	5.71	6.38
INTEREST(CAPITAL)	1911.57	2.04	1.21	1.35
MISCELLANEOUS	1427.29	1.52	.91	1.01
OTHER EXPENSES	18031.57	19.22	11.44	12.78
TOTAL CURRENT EXPENSES	141115.29	150.42	89.53	100.00

Table 7(b): Average Expenses - GROUP B

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)	PERCENT (%)
FEED PURCHASES	107057.14	68.15	40.45	50.49
SWINE PURCHASES	64173.29	40.85	24.25	30.27
HIRED LABOUR	5286.14	3.36	2.00	2.49
BEDDING	36.29	.02	.01	.02
VETERINARY & DRUG	252.57	.16	.10	.12
HOG SUPPLIES	164.86	.10	.06	.08
MARKETING COSTS	602.86	.38	.23	.28
UTILITIES	2482.71	1.58	.94	1.17
TAXES	543.29	.35	.21	.26
INSURANCE	941.57	.60	.36	.44
BUILDING REPAIRS	1453.00	.92	.55	.69
MACH & EQUIP EXPENSES	6586.29	4.19	2.49	3.11
AUTO EXPENSES	1434.86	.91	.54	.68
INTEREST(OPERATING)	7624.00	4.85	2.88	3.60
INTEREST(CAPITAL)	2878.14	1.83	1.09	1.36
MISCELLANEOUS	1279.43	.81	.48	.60
OTHER EXPENSES	9224.43	5.87	3.49	4.35
TOTAL CURRENT EXPENSES	212020.86	134.96	80.11	100.00

Net Cash Income is the difference between annual operating revenue and total current expenses. The resulting Net Cash Incomes were significantly different, $2,706.29 per farm ($2.88 per mkt. hog) for Group A compared to $13,256.71 per farm ($18.44 per mkt. hog) for Group B.

Net Farm Income which accounts for inventory changes and depreciation was $776.43 per farm (-$0.83 per mkt. hog) for Group A compared to $8,041.71 per farm ($5.12 per mkt. hog) for Group B. Net Farm Income in this instance represents the return to operator's labour and management, unpaid family labour and a reasonable return to owners equity.

Table 8(a): Income Summary - GROUP A

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)
TOTAL CURRENT INCOME	143821.57	153.30	91.25
TOTAL CURRENT EXPENSES	141115.29	150.42	89.53
NET CASH INCOME	2706.29	2.88	1.72
LESS:INVENTORY CHANGE	-164.86	-.18	-.10
LESS:DEPRECIATION	3647.57	3.89	2.31
NET FARM INCOME	-776.43	-.83	-.49

Table 8(b): Income Summary - GROUP B

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)
TOTAL CURRENT INCOME	225277.57	143.40	85.12
TOTAL CURRENT EXPENSES	212020.86	134.96	80.11
NET CASH INCOME	13256.71	8.44	5.01
LESS:INVENTORY CHANGE	-6050.00	-3.85	-2.29
LESS:DEPRECIATION	11265.00	7.17	4.26
NET FARM INCOME	8041.71	5.12	3.04

The average cost of pork production per hog marketed was the same for both groups at $131. Average costs per farm was $183,550 for Group A compared to $205,819 for Group B. Depreciation costs for Group B ($7.17 per mkt. hog) were significantly higher than those for Group A ($3.99 per mkt. hog). However, non-hog sales for Group A amounted to $22.44 per market hog compared to $7.27 per market hog for farms in Group B. (Tables 9(a) and (b))

Table 9(a): Average Cost of Pork Production - GROUP A

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)
TOTAL CURRENT EXPENSES	141115.29	150.42	89.53
PLUS:DEPRECIATION	3647.57	3.89	2.31
PLUS:INVENTORY CHANGE	-164.86	-.18	-.10
TOTAL COST	144598.00	154.13	91.74
LESS:NON-HOG SALES	21047.29	22.44	13.35
NET HOG COST	123550.71	131.70	78.39

Table 9(b): Average Cost of Pork Production - GROUP B

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTD ($)
TOTAL CURRENT EXPENSES	212020.86	134.96	80.11
PLUS:DEPRECIATION	11265.00	7.17	4.26
PLUS:INVENTORY CHANGE	-6050.00	-3.85	-2.29
TOTAL COST	217235.86	138.28	82.08
LESS:NON-HOG SALES	11416.86	7.27	4.31
NET HOG COST	205819.00	131.01	77.77

The Balance Sheet indicated an average investment per farm of $204,168 for Group A and $216,619 for Group B. However, on a per market hog basis the average investment for Group A, $217.63, was significantly more than that of Group B $137.89.

The average debt load for Group A was $82.22 per market hog and $39.63 per market hog for Group B. The average equity position for farms in Group A was 62 per cent compared to 71 percent for farms in Group B. (Table 10(a) and (b))

Table 10(a): Balance Sheet - GROUP A

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)	PERCENT (%)
ASSETS				
HOGS-BOARS	.00	.00	.00	.00
-SOWS & GILTS	.00	.00	.00	.00
-NURSING PIGS	.00	.00	.00	.00
-FEEDERS	42121.07	44.90	26.72	20.63
-BREEDING STOCK	.00	.00	.00	.00
TOTAL HOG INVENTORY	42121.07	44.90	26.72	20.63
FEED	6665.07	7.10	4.23	3.26
LAND	95335.71	101.62	60.49	46.69
BUILDINGS	32113.57	34.23	20.37	15.73
MACHINERY & EQUIPMENT	27677.57	29.50	17.56	13.56
SUPPLIES	41.43	.04	.03	.02
ACCOUNTS RECEIVABLE	.00	.00	.00	.00
OTHER	214.29	.23	.14	.10
TOTAL ASSETS	204168.71	217.63	129.54	100.00
LIABILITIES				
SHORT TERM	24793.21	26.43	15.73	32.14
INTERMEDIATE TERM	13495.93	14.39	8.56	17.50
LONG TERM	38842.50	41.40	24.64	50.36
TOTAL LIABILITIES	77131.64	82.22	48.94	100.00
OWNER'S EQUITY	127037.07	135.41	80.60	62.22

Table 10(b): Balance Sheet for GROUP B

	PER FARM ($)	PER MARKET HOG ($)	PER 100 LBS MKTED ($)	PERCENT (%)
ASSETS				
HOGS-BOARS	.00	.00	.00	.00
-SOWS & GILTS	.00	.00	.00	.00
-NURSING PIGS	.00	.00	.00	.00
-FEEDERS	58703.57	37.37	22.18	27.10
-BREEDING STOCK	.00	.00	.00	.00
TOTAL HOG INVENTORY	58703.57	37.37	22.18	27.10
FEED	4892.86	3.11	1.85	2.26
LAND	84407.14	53.73	31.89	38.97
BUILDINGS	38153.07	24.29	14.42	17.61
MACHINERY & EQUIPMENT	29643.86	18.87	11.20	13.68
SUPPLIES	.00	.00	.00	.00
ACCOUNTS RECEIVABLE	368.64	.23	.14	.17
OTHER	450.14	.29	.17	.21
TOTAL ASSETS	216619.29	137.89	81.85	100.00
LIABILITIES				
SHORT TERM	23827.64	15.17	9.00	38.27
INTERMEDIATE TERM	4935.29	3.14	1.86	7.93
LONG TERM	33495.21	21.32	12.66	53.80
TOTAL LIABILITIES	62258.14	39.63	23.52	100.00
OWNER'S EQUITY	154361.14	98.26	58.33	71.26

FINANCIAL ANALYSIS -		GROUP A	GROUP B
		PER FARM	PER FARM
EQUITY IN FARM	%	62.22	71.26
RETURN ON EQUITY	%	-12.70	-7.58
RETURN ON INVESTMENT	%	-2.56	-.56
CAPITAL TURNOVER	YRS	1.42	.96
CUR ASSETS/CUR LIAB.	$/$	1.97	2.68
ASSETS/LIABILITIES	$/$	2.65	3.48
DEBT/EQUITY RATIO	$/$	.61	.40

PRODUCTION ANALYSIS -		GROUP A	GROUP B
		PER FARM	PER FARM
AVERAGE MARKET HOGS SALES PER FARM	#	938	1,571
AVERAGE POUNDS OF PORK MARKETED	LBS	157,615	264,651
VALUE OF MARKET HOG SALES	$	110,611.00	200,383.00
TOTAL PERSON YEARS	#	1.56	2.41
FEEDERS SOLD/PERSON YR.	#	600	651
TOTAL SALES/PERSON YR.	$	91,940.66	93,310.20
LBS SOLD/PESON YEAR	LBS	100,758.27	109,618.66

FARROW TO FINSIH OPERATIONS

AVERAGE RESULTS FOR THE SIXTEEN SELECTED FARROW TO FINISH OPERATIONS

Receipts from the sale of hogs for the sixteen selected operations averaged $157,510 per farm or $2,883.77 per sow. Total hog sales accounted for 88.33 per cent of Total Current Income, which averaged $178,327 per farm ($2,584.45 per sow). (Table 11)

Table 11: Average Revenue for Sixteen (16) Farrow to Finish Operations - 1981

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)	PERCENT (%)
HOGS-MARKET	155810.50	2258.12	121.54	60.01	87.37
-WEANLINGS	16.19	.23	.01	.01	.01
-GILTS	14.75	.21	.01	.01	.01
-BOARS	.00	.00	.00	.00	.00
-CULL SOWS	1635.69	23.71	1.28	.69	.92
-CULL BOARS	33.69	.49	.03	.01	.02
-OTHER	.00	.00	.00	.00	.00
TOTAL HOG SALES	157510.81	2282.77	122.86	66.73	88.33
STABILIZATION	15857.19	229.81	12.37	6.72	8.89
SUBSIDIES	34.25	.50	.03	.01	.02
OTHER INCOME	4924.94	71.38	3.84	2.09	2.76
TOTAL CURRENT INCOME	178327.19	2584.45	139.10	75.55	100.00

Purchased feed was the largest current expense item totalling $94,908 per farm or $1,375.49 per sow and represented 56 per cent of the Total Current Expenses.

Total Current Expenses for the group amounted to $116,325 or $2,439.50 per market hog. (Table 12)

Table 12: Average Expenses for Sixteen (16) Farrow to Finish Operations - 1981

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)	PERCENT (%)
FEED PURCHASES	94908.69	1375.49	74.03	40.21	56.38
SWINE PURCHASES	9288.06	134.61	7.24	3.93	5.52
HIRED LABOUR	13004.88	188.48	10.14	5.51	7.73
BEDDING	133.88	1.94	.10	.06	.08
VETERINARY & DRUG	768.94	11.14	.60	.33	.46
HOG SUPPLIES	295.88	4.29	.23	.13	.18
MARKETING COSTS	1084.50	15.72	.85	.46	.64
UTILITIES	4848.94	70.27	3.78	2.05	2.88
TAXES	757.69	10.98	.59	.32	.45
INSURANCE	1535.50	22.25	1.20	.65	.91
BUILDING REPAIRS	2170.81	31.46	1.69	.92	1.29
MACH & EQUIP EXPENSES	13923.13	201.78	10.86	5.90	8.27
AUTO EXPENSES	399.00	5.78	.31	.17	.24
INTEREST(OPERATING)	10098.31	146.35	7.88	4.28	6.00
INTEREST(CAPITAL)	3315.50	48.05	2.59	1.40	1.97
MISCELLANEOUS	1680.31	24.35	1.31	.71	1.00
OTHER EXPENSES	10111.50	146.54	7.89	4.28	6.01
TOTAL CURRENT EXPENSES	168325.50	2439.50	131.30	71.31	100.00

There are a number of different ways to measure income. In this section, two of the more common methods are highlighted.

1. Net Cash Income is the difference between annual operating revenue and total current expenses. For this group Net Cash Income amounted to $10,002 per farm or $144.95 per sow. (Table 13)

2. Net Farm Income is the difference between annual operating revenue and total current expenses with adjustments made for inventory changes and depreciation. Net Farm Income for the group averaged $1,518.94 per farm or -$22.01 per sow. In this instance Net Farm Income represents the return to the factors used in the production of pork. These include, operator and unpaid family labour (2.48 person years), management as well as a reasonable return to $184,569 of Owner's Equity. (Table 13)

Table 13: Income Summary for Sixteen (16) Farrow to Finish Operations - 1981

	PER FARM ($)	PER SOW ($)	PER MARKET HOG ($)	PER 100 LBS MKT ($)
TOTAL CURRENT INCOME	178327.19	2584.45	139.10	75.55
TOTAL CURRENT EXPENSES	168325.50	2439.50	131.30	71.31
NET CASH INCOME	10001.69	144.95	7.80	4.24
LESS:INVENTORY CHANGE	-2228.81	-32.30	-1.74	-.94
LESS:DEPRECIATION	13749.44	199.27	10.72	5.82
NET FARM INCOME	-1518.94	-22.01	-1.18	-.64

The average cost of pork production for this group was $0.741 per pound marketed or $2,535.09 per sow.

Note that costs used in this calculation did not include operator and family labour and interest on equity charges. For the purpose of this exercise, all non-hog enterprises were assumed to have made no profit or loss, non-hog sales (which equal non-hog expenses) were subtracted from total costs to reflect the costs associated with hog production only. (Table 4)

Table 14: Average Cost of Pork Production for Sixteen (16) Farrow to Finish Operations - 1981

	PER FARM ($)	PER SOW ($)	PER MARKET HOG ($)	PER 100 LBS MKT ($)
TOTAL CURRENT EXPENSES	168325.50	2439.50	131.30	71.31
PLUS:DEPRECIATION	13749.44	199.27	10.72	5.82
PLUS:INVENTORY CHANGE	-2228.81	-32.30	-1.74	-.94
TOTAL COST	179846.13	2606.47	140.29	76.19
LESS:NON-HOG SALES	4924.94	71.38	3.84	2.09
NET HOG COST	174921.19	2535.09	136.44	74.10

The balance sheet for this group indicated an average farm investment of $254,782. The average debt load was $70,213 resulting in a equity position of 72.4 per cent.

Land represented the largest single investment followed by hog investory and machinery and equipment, 36 per cent, 26 per cent, and 20.5 per cent respectively. (Table 15)

Table 15: Balance Sheet for Sixteen (16) Farrow to Finish Operations - 1981

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)	PERCENT (%)
ASSETS					
HOGS-BOARS	678.91	9.84	.53	.29	.27
-SOWS & GILTS	12910.16	187.10	10.07	5.47	5.07
-NURSING PIGS	14614.97	211.81	11.40	6.19	5.74
-FEEDERS	38972.69	564.82	30.40	16.51	15.30
-BREEDING STOCK	311.72	4.52	.24	.13	.12
TOTAL HOG INVENTORY	67488.44	978.09	52.64	28.59	26.49
FEED	9317.84	135.04	7.27	3.95	3.66
LAND	90790.63	1315.81	70.82	38.46	35.63
BUILDINGS	33271.66	482.20	25.95	14.10	13.06
MACHINERY & EQUIPMENT	52518.22	761.13	40.97	22.25	20.61
SUPPLIES	248.38	3.60	.19	.11	.10
ACCOUNTS RECEIVABLE	1146.63	16.62	.89	.49	.45
OTHER	.00	.00	.00	.00	.00
TOTAL ASSETS	254781.78	3692.49	198.74	107.94	100.00
LIABILITIES					
SHORT TERM	20319.50	294.49	15.85	8.61	28.94
INTERMEDIATE TERM	13077.34	189.53	10.20	5.54	18.63
LONG TERM	36815.84	533.56	28.72	15.60	52.43
TOTAL LIABILITIES	70212.69	1017.58	54.77	29.75	100.00
OWNER'S EQUITY	184569.09	2674.91	143.97	78.19	72.44

A number of management factors were calculated to illustrate the financial, production and labour position for the selected farrow to finish operations surveyed.

Financial Analysis

Current Assets/Current Liabilities		3.85
Total Assets/Total Liabilities		3.63
Debt/Equity		.38
Price received per 100 lbs. marketed	($)	66.73
Net Farm Income per Sow	($)	-22.01
Investment per Sow	($)	3,692.49
Value of Pork Sold per Sow	($)	2,282.77
Value of Pork Sold	($)	157,510.81
Capital Turnover	(Yrs)	1.43
Equity in Business	(%)	72.44
Return on Equity	(%)	-10.38
Return on Investment	(%)	-2.26

Production Analysis

NOTE: Due to the difficulties in obtaining production information from a number of the farms surveyed, the following analysis is based on 7 farms only.

		PER FARM	PER SOW
Number of Sows	#	66.43	1.00
Number of Boars	#	3.07	.05
Number of Litters	#	115.71	1.74
Pigs Born	#	1293.71	19.48
Pigs Born Alive	#	1217.86	18.33
Pigs Weaned	#	1050.29	15.81
Market Hogs	#	1443.43	21.73
Pigs Born/Litter	#	11.18	
Pigs Born Alive/Litter	#	10.52	
Pigs Weaned/Litter	#	9.08	
Replacement Gilts Kept	#	31.67	.48
Sow Mortality	#	1.67	.03
Cull Rate On Sows	%	42.58	
Feeder Mortality	#	41.38	.62
Feeder Mortality Rate	%	2.73	
Suckling Mortality	#	243.29	3.66

Labour Analysis: Based on 16 Farm Average

		PER FARM
Total Person Years	#	2.48
Sows Kept/Person Yrs.	#	27.84
Feeders Sold/Person Yr.	#	514.60
Weaners Sold/Person Yr.	#	.23
Total Sales/Person Yr.	$	71,960.50
Lbs Sold/Person Yr.	Lbs	95,251.99

AVERAGE OF EIGHT FARROW TO FINISH OPERATIONS

WITH LESS THAN 70 SOWS AND EIGHT OPERATIONS

WITH 70 SOWS OR MORE

The sixteeen (16) farrow to finish operations surveyed, were divided into two groups; those farms with less than 70 sows (Group A) and those farms with 70 sows or More (Group B).

For those farms with less than 70 sows, total hog sales averaged $140,996 per farm or $2,679.26 per sow, making up 89 percent of the Total Current Income. Those farms with 70 or more sows had average total hog sales of $174,025 or $2,038.36 per sow, which accounted for 88 per cent of Total Current Income.

In absolute terms, total current income for Group A was $158,492 per farm ($3,011.73 per sow) compared to $198,162 per farm ($2,321.08 per sow) for Group B. (Table 16)

Table 16(a): Average Revenue for Group A

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)	PERCENT (%)
HOGS-MARKET	139018.50	2641.68	119.74	65.22	87.71
-WEANLINGS	32.38	.62	.03	.02	.02
-GILTS	29.50	.56	.03	.01	.02
-BOARS	.00	.00	.00	.00	.00
-CULL SOWS	1890.88	35.93	1.63	.89	1.19
-CULL BOARS	25.00	.48	.02	.01	.02
-OTHER	.00	.00	.00	.00	.00
TOTAL HOG SALES	140996.25	2679.26	121.44	66.15	88.96
STABILIZATION	15308.00	290.89	13.19	7.18	9.66
SUBSIDIES	.00	.00	.00	.00	.00
OTHER INCOME	2188.25	41.58	1.88	1.03	1.38
TOTAL CURRENT INCOME	158492.50	3011.73	136.51	74.36	100.00

Table 16(b): Average Revenue for Group B

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)	PERCENT (%)
HOGS-MARKET	172602.50	2021.70	123.02	66.66	87.10
-WEANLINGS	.00	.00	.00	.00	.00
-GILTS	.00	.00	.00	.00	.00
-BOARS	.00	.00	.00	.00	.00
-CULL SOWS	1380.50	16.17	.98	.53	.70
-CULL BOARS	42.38	.50	.03	.02	.02
-OTHER	.00	.00	.00	.00	.00
TOTAL HOG SALES	174025.38	2038.36	124.04	67.21	87.82
STABILIZATION	16406.38	192.17	11.69	6.34	8.28
SUBSIDIES	68.50	.80	.05	.03	.03
OTHER INCOME	7661.63	89.74	5.46	2.96	3.87
TOTAL CURRENT INCOME	198161.88	2321.08	141.24	76.53	100.00

Total Current Expenses for Group A were roughly 31 percent higher than Group B on a per sow basis, however in terms of pork marketed there was only a 2 per cent difference between the two groups, $70.53 per 100 pounds marketed for Group A and $71.95 per 100 pounds marketed for Group B.

Purchased feed was the largest current expense, making up 47.4 per cent and 63.6 per cent of the total for Group A and Group B respectively. Swine purchases for Group A were 9.3 per cent higher than the average for Group B. As well, machinery and equipment expenses were significantly more for Group A than Group B. (Table 17 (a) and (b))

Table 17(a): Average Expenses for Group A

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)	PERCENT (%)
FEED PURCHASES	71262.25	1354.15	61.38	33.43	47.40
SWINE PURCHASES	16054.13	305.07	13.83	7.53	10.68
HIRED LABOUR	10326.00	196.22	8.89	4.84	6.87
BEDDING	.00	.00	.00	.00	.00
VETERINARY & DRUG	723.50	13.75	.62	.34	.48
HOG SUPPLIES	149.13	2.83	.13	.07	.10
MARKETING COSTS	868.38	16.50	.75	.41	.58
UTILITIES	4454.38	84.64	3.84	2.09	2.96
TAXES	650.38	12.36	.56	.31	.43
INSURANCE	1337.00	25.41	1.15	.63	.89
BUILDING REPAIRS	1790.88	34.03	1.54	.84	1.19
MACH & EQUIP EXPENSES	17617.75	334.78	15.17	8.27	11.72
AUTO EXPENSES	486.63	9.25	.42	.23	.32
INTEREST(OPERATING)	9592.00	182.27	8.26	4.50	6.38
INTEREST(CAPITAL)	3844.88	73.06	3.31	1.80	2.56
MISCELLANEOUS	1628.63	30.95	1.40	.76	1.08
OTHER EXPENSES	9552.00	181.51	8.23	4.48	6.35
TOTAL CURRENT EXPENSES	150337.88	2856.78	129.49	70.53	100.00

Table 17(b): Average Expenses Group B

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)	PERCENT (%)
FEED PURCHASES	118555.13	1388.64	84.50	45.78	63.63
SWINE PURCHASES	2522.00	29.54	1.80	.97	1.35
HIRED LABOUR	15683.75	183.70	11.18	6.06	8.42
BEDDING	267.75	3.14	.19	.10	.14
VETERINARY & DRUG	814.38	9.54	.58	.31	.44
HOG SUPPLIES	442.63	5.18	.32	.17	.24
MARKETING COSTS	1300.63	15.23	.93	.50	.70
UTILITIES	5243.50	61.42	3.74	2.02	2.81
TAXES	865.00	10.13	.62	.33	.46
INSURANCE	1734.00	20.31	1.24	.67	.93
BUILDING REPAIRS	2550.75	29.88	1.82	.99	1.37
MACH & EQUIP EXPENSES	10228.50	119.81	7.29	3.95	5.49
AUTO EXPENSES	311.38	3.65	.22	.12	.17
INTEREST(OPERATING)	10604.63	124.21	7.56	4.10	5.69
INTEREST(CAPITAL)	2786.13	32.63	1.99	1.08	1.50
MISCELLANEOUS	1732.00	20.29	1.23	.67	.93
OTHER EXPENSES	10671.00	124.99	7.61	4.12	5.73
TOTAL CURRENT EXPENSES	186313.13	2182.29	132.80	71.95	100.00

Net Cash Income is the difference between annual operating revenue and total current expenses. The resulting Net Cash Incomes for the two groups indicated that on average Group B was 19.5 per cent higher than Group A on a per pound marketed basis. In absolute terms, the average Net Cash Income for Group A was $8,154.62 per farm ($154.96 per sow) compared to $11,848 ($138.78 per sow) for Group B.

Net Farm Income which accounts for inventory changes and depreciation was -$1.16 per 100 pounds marketed for Group A and -$0.22 per 100 pounds marketed for Group B. Net Farm Income in this instance represents the return to operator labour and management, unpaid family labour as well as a reasonable return to owner's equity. (Table 18 (a) and (b))

Table 18(a): Income Summary for Group A

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER100 LBS MKT ($)
TOTAL CURRENT INCOME	158492.50	3011.73	136.51	74.36
TOTAL CURRENT EXPENSES	150337.88	2856.78	129.49	70.53
NET CASH INCOME	8154.62	154.96	7.02	3.83
LESS:INVENTORY CHANGE	-2470.75	-46.95	-2.13	-1.16
LESS:DEPRECIATION	13088.38	248.71	11.27	6.14
NET FARM INCOME	-2463.00	-46.80	-2.12	-1.16

Table 18(b): Income Summary for Group B

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)
TOTAL CURRENT INCOME	198161.88	2321.08	141.24	76.53
TOTAL CURRENT EXPENSES	186313.13	2182.29	132.80	71.95
NET CASH INCOME	11848.75	138.78	8.45	4.58
LESS:INVENTORY CHANGE	-1986.88	-23.27	-1.42	-.77
LESS:DEPRECIATION	14410.50	168.79	10.27	5.57
NET FARM INCOME	-574.88	-6.73	-.41	-.22

The average cost of pork production per hog marketed was the same for both groups at roughtly $136.00. In terms of pounds of pork marketed Group A's average costs amounted $74.48 per 100 pounds marketed and Group B's $73.79 per 100 pounds marketed. (Table 19 (a) and (b))

Table 19(a): Average Cost of Pork Production Group A

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)
TOTAL CURRENT EXPENSES	150337.88	2856.78	129.49	70.53
PLUS:DEPRECIATION	13088.38	248.71	11.27	6.14
PLUS:INVENTORY CHANGE	-2470.75	-46.95	-2.13	-1.16
TOTAL COST	160955.50	3058.54	138.64	75.51
LESS:NON-HOG SALES	2188.25	41.58	1.88	1.03
NET HOG COST	158767.25	3016.95	136.75	74.48

Table 19(b): Average Cost of Pork Production Group B

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)
TOTAL CURRENT EXPENSES	186313.13	2182.29	132.80	71.95
PLUS:DEPRECIATION	14410.50	168.79	10.27	5.57
PLUS:INVENTORY CHANGE	-1986.88	-23.27	-1.42	-.77
TOTAL COST	198736.75	2327.81	141.65	76.75
LESS:NON-HOG SALES	7661.63	89.74	5.46	2.96
NET HOG COST	191075.13	2238.07	136.19	73.79

The balance sheet indicated an average investment per farm of $208,047 for Group A and $301,516 for Group B. On a per sow basis however average investment for Group A was $3,953.39 compared to $3,531.67 for Group B. The average debt load per sow for Group A was $1,547.03 which was significantly more than the debt load for Group B $691.22.

The equity position of the farms in Group B was roughly 20 per cent higher than those farms in Group A, 80.4 per cent for Group B and 61 per cent for Group A. (Table 20 (a) and (b).

Table 20(a): Balance Sheet for Group A

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)	PERCENT (%)
ASSETS					
HOGS-BOARS	623.44	11.85	.54	.29	.30
-SOWS & GILTS	8917.19	169.45	7.68	4.18	4.29
-NURSING PIGS	8908.06	169.27	7.67	4.18	4.28
-FEEDERS	35664.50	677.71	30.72	16.73	17.14
-BREEDING STOCK	623.44	11.85	.54	.29	.30
TOTAL HOG INVENTORY	54736.63	1040.13	47.15	25.68	26.31
FEED	12061.63	229.20	10.39	5.66	5.80
LAND	60325.00	1146.32	51.96	28.30	29.00
BUILDINGS	33966.31	645.44	29.26	15.94	16.33
MACHINERY & EQUIPMENT	46372.63	881.19	39.94	21.76	22.29
SUPPLIES	428.63	8.14	.37	.20	.21
ACCOUNTS RECEIVABLE	156.25	2.97	.13	.07	.08
OTHER	.00	.00	.00	.00	.00
TOTAL ASSETS	208047.06	3953.39	179.20	97.60	100.00
LIABILITIES					
SHORT TERM	25965.38	493.40	22.36	12.18	31.89
INTERMEDIATE TERM	14249.00	270.76	12.27	6.68	17.50
LONG TERM	41198.13	782.86	35.49	19.33	50.60
TOTAL LIABILITIES	81412.50	1547.03	70.12	38.19	100.00
OWNER'S EQUITY	126634.56	2406.36	109.07	59.41	60.87

Table 20(b): Balance Sheet for Group B

	PER FARM ($)	PER SOW ($)	PER MKT HOG ($)	PER 100 LBS MKT ($)	PERCENT (%)
ASSETS					
HOGS-BOARS	734.38	8.60	.52	.28	.24
-SOWS & GILTS	16903.13	197.99	12.05	6.53	5.61
-NURSING PIGS	20321.88	238.03	14.48	7.85	6.74
-FEEDERS	42280.88	495.24	30.14	16.33	14.02
-BREEDING STOCK	.00	.00	.00	.00	.00
TOTAL HOG INVENTORY	80240.25	939.86	57.19	30.99	26.61
FEED	6574.06	77.00	4.69	2.54	2.18
LAND	121256.25	1420.28	86.43	46.83	40.22
BUILDINGS	32577.00	381.58	23.22	12.58	10.80
MACHINERY & EQUIPMENT	58663.81	687.13	41.81	22.66	19.46
SUPPLIES	68.13	.80	.05	.03	.02
ACCOUNTS RECEIVABLE	2137.00	25.03	1.52	.83	.71
OTHER	.00	.00	.00	.00	.00
TOTAL ASSETS	301516.50	3531.67	214.91	116.44	100.00
LIABILITIES					
SHORT TERM	14673.63	171.87	10.46	5.67	24.87
INTERMEDIATE TERM	11905.69	139.45	8.49	4.60	20.17
LONG TERM	32433.56	379.90	23.12	12.53	54.96
TOTAL LIABILITIES	59012.88	691.22	42.06	22.79	100.00
OWNER'S EQUITY	242503.63	2840.45	172.85	93.65	80.43

Due to difficulties in obtaining portions of the production information from a number of the farms surveyed, only limited production analysis is available. Management factors were also calculated to illustrate the financial and labour positions of the group.

Financial Analysis

		Group A	Group B
Investment Per Sow		3953.39	3531.67
Hog Sales Per Sow		2679.26	2038.36
Net Farm Income per Sow		-46.80	-6.73
Equity in Farm	%	60.87	80.43
Return on Equity	%	-17.10	-6.87
Return on Investment	%	-3.95	-1.09
Capital Turnover	YRS	1.31	1.52
Current Assets/ Current Liabilities	$/$	2.60	6.07
Assests/Liabilities	$/$	2.56	5.11
Debt /Equity Ratio	$/$	.64	.24

Production Analysis

No. of Sows per Farm	#	52.63	85.38
No. of Market Hogs Sales	#	1161.00	1389.50
Market Hog Sales Per Sow	#	22.06	16.28
Pork Marketed Per Sow	Lbs.	3665.27	2753.15
Total Person Years	#	2.36	2.59
Sows Kept/Person Year	#	22.28	32.92
Feeders Sold/Person Year	#	491.43	535.71
Total Sales/Person Year	$	67,086.74	76,399.73
Pounds Sold/Person Year	Lbs.	90,223.61	99,832.05

SUMMARY

Thirty selected Prince Edward Island swine producers were surveyed for their 1981 financial and production information. The farms were divided into two major grups; finishing operations and farrow to finish operations. For each group the results were presented as: revenue, expenses, income summary, average cost of pork production, balance sheet and selected information.

In compiling average results for the two major groups and sub-groups it was noted that extreme variation occurred betweenfarms in terms of revenues and expenses, and thus Net Farm Incomes. For this reason it is difficult to isolate any specific factors which may indicate differences between production units thus the profitability of a particular swine operation.

In an individual sense, standards of performance and business progress are matters of personal choice and family goal setting. Each farm family will have a different set of goals or objectives that must be met through the farm business. It is for each farmer to identify these and then compare performance in achieving these objectives.

There are several ways to assess farm performance. These include:

- Comparing this year's performance with last year's.
- Comparing performance with group average data for farms of similar size and general characteristics, eg. this study.
- Comparing performance to that found by research - realizing that the research data were obtained under a special set of conditions.

The principal value of an analysis of financial data is that it suggests questions that need to be answered. It acts as an indicator of potential problems.